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Section V
17/10

15(W)

TOP SECRET

TICOM/I-129

INTERROGATION OF SS ROTTENFUEHRER GRASSHOF

1. The report attached is extracted from the first and second interrogation reports on SS Rottenfuehrer HANS ALFRED KARL GRASSHOF received from G.S.I., 21 A.G. and dated 22nd August, 1945.

2. The report gives P/W's account of cyphers used by the Havel Institut (part of RSHA) prefaced by a short resume of his career.

TICOM

5th Oct.1945.

No. of pages: 7

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via GSI 21 AG.
Ref.21 AGp/INT/2464
22 Aug.

Second Field Interrogation
Report of SS Rottenführer GRASSHOF
of the Havel Institute

1. Personal Details

Date and Place of Birth:	24 Nov. 21 Blankenburg/Harz.	
Nationality:	German.	Occupation - None (direct from school)
Arrived at 031 camp:	8 July 45	
Languages:	French moderate: English, from school only.	
Countries visited:	France, Portugal, and Italy in course of war service.	

PW. was attached for some time to:

GRUNEWALD.

This was Amt VI F of the RSHA and probably controlled the "Havel Institut" the official description of which is "VI F/Havel Institut". PW has little idea of the relation between GRUNEWALD and the Havel Institute but believes the latter had become practically independent of GRUNEWALD by the middle of 1943 and was directly subordinated to Amt VI.

2. Cyphers of the "Havel Institut."

Simple Transposition

The main system known to Grasshof is a transposition code (Versetz-Verfahren) in distinction to a substitution code. It worked as follows:-

There were three stages in enciphering.

Stage 1

10	1	7	5	9	4	6	3	8	2
a	n	x	l	e	i	t	x	h	a
b	e	x	d	e	f	e	k	t	x
k	o	m	m	e	x	e	r	s	t
x	m	o	r	g	e	n	x	x	x

This consisted of writing out the message on a prepared pad with the numbers 1-10 in scrambled order. This pad remained constant for months together. "X" is as usual used for break-sign. The message above reads "An Leit.Ich habe Defekt. Komme erst morgen". The message had to be made up with Xs to a multiple of 5, since 5-letter groups were being produced.

Stage 2

1 n x l x e

8 e k d x e

3 o r m m e

6 m x r o g

7 a i t h a

5 x f e t b

4 t x e s k

2 x e n x x

This consists in taking the vertical column 1 in Stage 1 and writing in vertically in the prepared pad of Stage 2 (which is not necessarily complete from 1-10). Vertical column 2 in Stage 1 is then added and so on

Stage 3

Horizontal column 1 in Stage 2 is written out followed by horizontal column 2 etc. In this example by accident the groups are already five figures but had this not been the case they would have been arbitrarily broken up into five figure groups. The message finally reads: "nxlxe xenxx ormme txesk xfetb mxrog aitha ekdxe".

Transposition based on Book

In the middle of February 1943 he took a more complicated version of the same thing to Lisbon. This worked on the same principle, except that the prepared pads were replaced by a constantly changing system based on a book. Grasshof believes the book to have been called "Franziskus in Assisi".

The first process was to choose a page and line of the book e.g. Page 164, line 17. Suppose the line runs: "-riet dadurch gegen den Baum". This line is then broken arbitrarily - let us say after the 16th letter, thus: "-riet dadurch gegen / den Baum". 7 letters are left. The first part of the line will then become the key to Stage 1 of the previous process and the second part will become the key to Stage 2. This is done by numbering the letters of each part according to their position in the alphabet, thus:

R I E T D A D U R C H G E G E N

5 3 1 4 2 6 7

13 11 5 15 3 1 4 16 14 2 10 8 6 9 7 12

The second line above shows the process of numbering in an early stage and the third line its completion. In the same way the words "DEN BAUM" become " 3 4 6 2 1 7 5 " and are used as the vertical key in Stage 2.

In order to indicate the page and line chosen and the position of the break in the line, indicator groups are used. The appropriate indicator groups for the above message read 16417 16807 made up as follows:-

First group: Three figures giving page plus two figures giving line.

Second group: Two figures giving numbers of letters before break plus any random figure plus two figures giving number of letters after the break.

These indicator groups are coded in the following way :-

0 1 2 3 4 5 6 7 8 9

g h i j a b c d e f

k l m n o p q r s t

u v w x y z

A number can be encoded with any one of the letters underneath it. For instance the groups 16417 16807 can be encoded as heald vqskr or alternatively lqovr hceud. These indicator groups in two alternative encodings appear as 3rd and 4th groups and last but three and last but two in the message.

Wheel.

Another system which was supposed to have been used in Rome at the end of 1943 but which proved too clumsy was known as the Little Wheel (Raedchen). It consisted of two circular plates mounted one above the other enabling two scrambled alphabets to be slid against each other letter by letter according to a complicated number sequence derived from the date and time of the message. Grasshof is not aware that it was ever used.

In addition he states that the Enigma machine was used for internal communications i.e. in Germany and German occupied territory, but not of course in other countries as the Enigma machine was not allowed out of German occupied territory.

3. Havel Institut

1. The Havel Institut was situated at Berlin Wannsee, Am Grossen Wansee 72, with the transmitters housed at about a kilometer's distance in No. 46 of the same street.

2. The Institute consisted of a piece of property at the edge of the Wannsee with a villa (the main building) a small house (originally servants' quarters), and a gate house (used by the guard).

3. When Grasshof first knew it, it consisted of a cypher section, a radio room with three receivers and morse keys for the remotely operated transmitters, and a teleprint room with a connection direct to Amt VI of the RSHA in Berlin Schmargendorf, Berkaer Strasser (This teleprinter was probably a G-Schreiber). These offices occupied the ground floor, and the personnel lived and messed in the basement and the first and second floors.

4. The organisation was continually growing and by 1943 or early 1944, had taken over the whole of the main building. The radio section had increased to 7 receivers; a cypher research section (believed for breaking down currupt messages) had been added; and the second floor had been taken over for training and practice purposes. The small house in the grounds had a maintenance shop on the first floor with general admin.offices on the ground floor. The personnel were by this time living out in the neighbourhood.

COMMUNICATIONS NETWORK

5. All communications from Havel Institut were point-to-point. There was no network or star . The only move in this direction came at the beginning of 1945, when a permanent night and day frequency was manned to allow stations to call on urgent matters. Apart from this the system was for the operators to arrange a time at which they would come on the air again. ("I have nothing more for you. Will call you again at 0800 tomorrow").

6. At the beginning Berlin communicated direct with outstations but as the volume of traffic increased a number of subsidiary stations (Nebenstellen or Wetterstellen) were set up, each in charge of a number of outstations (Aussenstellen) as follows:-

Control Station - Havel Institut, operating with the subsidiary stations.

Emergency Station - Babelsberg nr. Potsdam. Alternative for Havel Institut but also running communications with outstations in Norway.

Subsidiary Stations -

Schwarzwald	-	Controlling French outstations.
Bamberg	-	Italian
Vienna	-	Balkans
Marienbad	-	Balkans
Kirchsassen (nr. Prague)	-	S.W. Europe and Balkans.

This allocation of areas to the subsidiary stations is not arranged geographically, but according to reception conditions.

7. SIGNALS

Transmitters of 800, 150 and 40 watts believed made by Lorenz. Subsidiary stations had mainly 800 or 150 watts transmitters of the same make.

Receivers - At first American H.R.Os. Then went on to a German imitation known as K.S.T. made possibly by Koerting. It had three coils giving a range of approx. 3,000 to 15,000 kcs. A Phillips 2,500 to 25,000 kcs. was also used.

Frequencies - Believed exclusively between 3,000 and 12,000 kcs.

Callsigns - Believed that they were completely arbitrary. Three character, mainly three letter.

PERSONALITIES

8. A. In the period 1941 - 1942

Staff:

Dienststellenleiter	Ustuf.	Dr. SCHMIDTHENNER
Deputy	Ustuf.	Dr. SCHAEFFNER

Radio Section:

	Oschar.	WALLOR, Helmuth
	Ang.	MUELLER, Hans
	Ang.	LECHNER, Walther
		FLORENTIN

Cypher Section:

	Oschar.(?)	WERNER, Kurt (In charge)
		BREDICK, ---
	Rttf.	INSEL, Willi.

Teleprinter:

	Oschar. or Hschar.	REDLIN, Walther

B. After the expansion of 1943-1944

Staff:

Dienststellenleiter	Stubaf.	SIEPEN (2nd half of 1942 preceded by a number of men for a short time)
Deputy	Hstf.	Dr. SCHAEFFNER (In charge for a short time)
Communications planning:	Hstf.	HARTENSTEIN
Cypher Research:	Hptm.a D. Ang.	KANZ (replaced 1944 by) VOIGT
Training:	Ang.	FAUL
Tech. supplies:	Hstuf.	CHRISTENSEN
Maintenance:	Ustuf.	KRUEGER, Arthur

Radio Operators:

Rottf.(?)	VOSS, Henry
Uschar.	MARGOLUS, Erich
Ang.	SCHLUETER, Hermann
Ang.	SCHUHMACHER, ---
Oschar.	KLAUS, Lorenz
Haschar.	KRISCHKER, Karl
Strm.	VOLLERT, Rolf
and a few girls.	

Cypher Section:

Wachtmeister (Police)	MERSMANN, Josef (?)
Scharf.	ELLMENREICH, Herbert
Strm.	REICHEL, Josef
Oschar.	SCHROEDER, Herbert
and a few girls.	

Teleprinter:

Oschar.	FLECKER, Harold.

MISCELLANEOUS

9. Grasshof believes that the Havel Institut received its anme at the end of 1942, and that before this time it was known as Dienststelle, Wannsee.

10. In December 1944, Stubaf. Siepen was replaced by Stubaf. FAROHS. The latter carried out a reform to end the anomalous position of a civilian semi-independent organisation employing civilians and military personnel on the same jobs. To this end, the Havel Institut was to be separated from Amt VI and made a Nachrichten-regiment z.b.V. of the Waffen SS and all personnel were to become members of the Waffen SS. This change was carried out on paper at least. Grasshof is not aware of any number allotted to the Nachrichtenregiment z.b.V.

(Note: Grasshof was questioned particularly on the spelling of FAROHS, but claims to be sure of this version.)

11. It was the custom for Amt VI personnel to sign their messages with a cover-name or number on occasion. The only cover name which Grasshof is able to remember is that of Dr. REICHE. This was ULEX.

12. A radio station was built at GROSSGESCHWENDA, near Rudolstadt in Thueringen. It was set up in 1945 by Farohs and was intended as an alternative for Berlin/Wannsee, but was overrun before it could operate.

13. Owing to the fact that it employed a number of military personnel the Havel Institut was allotted a Feldpostnummer 48685.